

Animal Control

Health Objectives for the Year 2010: Reduce injury and deaths associated with animal bites and attacks. Reduce behavior of molesting, abusing, and neglecting animals. Increase public health and safety by educating the public regarding responsible pet ownership and by enforcing of local ordinances.

Health Implications

Animal Bites

Each year, animal attack injuries result in approximately 12 human deaths in the United States. The Center for Disease Control (CDC) reported 279 fatalities between 1979 and 1994. In 1995 there were 11 deaths and 14 in 1996. For the 1979–96 period, 3 deaths were documented deaths in Nebraska.¹ None have occurred in Lincoln. CDC and the Insurance Information Institute has also highlighted the following:

1. Dog bites are the number one public health problem of children, ahead of measles and mumps combined. More than half of all children 12 and younger have been bitten by a dog. Children are the victims in 60% of the dog bites.²
2. Reported dog attacks have increased at a rate of 2% annually and 37% from 1986 to 1994.²
3. Every 40 seconds someone in the United States seeks medical care because of a dog bite. About 4.5 million injuries occur from dog bites in the United States every year, with 800,000 requiring medical treatment.²
4. Insurance companies paid an estimated \$250 million in dog bite liability claims in 1996. State Farm Insurance Companies reported more than 11,000 dog-bite claims and more than \$80 million paid out in liability claims in 1997. The average insurance liability claim per dog bite cost is \$12,000.²
5. The chances of being bitten by a dog in 1999 are 1 in 50. The chances that the victim of a fatal dog attack will be a burglar are 1 in 777 but the chances it will be a child are 7 in 10.²

Additionally, in the January 20, 1999 issue of the *Journal of the American Medical Association*, CDC, in a letter to the editor, stated that of dog-bite injuries resulting in hospital charges, direct medical charges are estimated at \$164.9 million and represent only 65% to 70% of the total cost of injury.

Rabies, a potentially fatal disease, is a possible threat from animal bites. The incidence of rabies deaths is low in the United States, yet each year approximately 16,000–25,000 persons receive prophylaxis.² In the Midwest, skunks are the primary carrier of rabies. However,

Table 1: Animal Control Indicators

All indicators are rates per 100,000 persons

Health Status		Lancaster Recent	Lancaster Objective 2010	Nebraska Recent	Nebraska Objective 2010	National Recent	National Objective 2010
Animal bites (Lincoln, human victims only)		225.0 ¹	210.0	--	--	--	--
Animal bites (Lincoln and Lancaster County, human victims only)		259.0 ²	210.0	--	--	--	--
All reported animal bites (Lincoln, animal and human victims)		256.0 ¹	240.0	--	--	--	--
Cruelty/Neglect calls (Lincoln)		434.0 ³	400.0	--	--	--	--
Emergency room visits for nonfatal dog bites, injuries among children 9 and younger (Lincoln and Lancaster County)		226.0 ⁴	190.0	--	--	325.0 ⁵	280.0 ⁶
Risk Reduction							
Educational Presentations (Lincoln)		44.5 ¹	200.0	--	--	--	--
Licensed and rabies-vaccinated dogs and cats (Lincoln)		20,945.0 ¹	27,300.0	--	--	--	--
Percent of dogs and cats spayed or neutered (Lincoln)		79.5 ⁷	85.0	--	--	57.4 ⁸	--

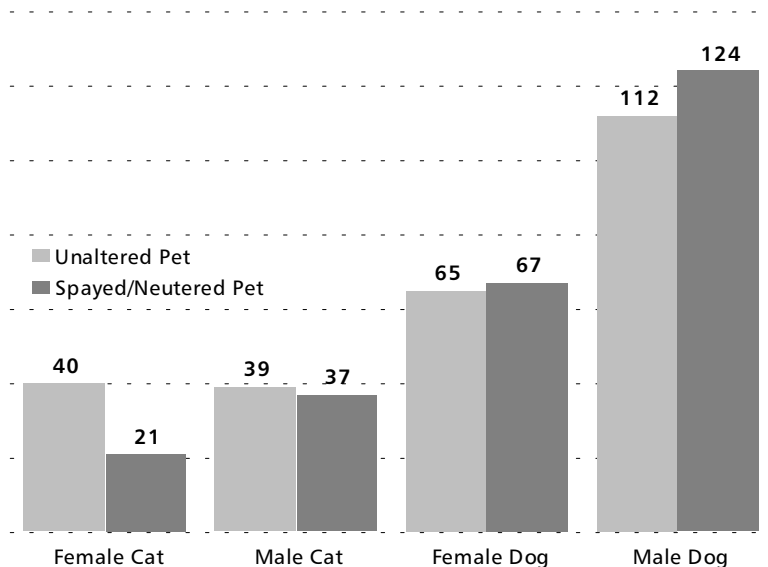


Figure 1: Bites by sex of animal, City of Lincoln, FY 1999. Although a higher frequency of bites are from altered dogs, more than twice as many dogs are altered as unaltered. Thus, bite rates for altered dogs are far lower than for unaltered dogs.¹

an extremely aggressive form of raccoon rabies became epizootic in the eastern states during the late 1990s and has moved into eastern Ohio as of 1999. This may become a factor locally some time in the next five to six years. In addition to rabies, animal bites can be the source of viral and bacterial infections, psychological trauma, disfigurement, and scarring.

The risk of animal-bite injuries are influenced by several factors. The disposition or temperament of the animal, the age and sex of the victim and animal, and an individual's occupation can influence animal-bite risk.

A reduction in the risk of disease and injury can be realized by the control of dangerous and vicious dogs, enforcement of animal control ordinances, and vaccination of pets. Educational programs emphasizing pet owner responsibility and ownership are effective means of risk reduction.

Animal Abuse and Violence

Many recent studies have shown a correlation or link between animal cruelty and domestic violence. Between 20% and 57% of victims with animals reported their batterers had actually hurt or killed their animals (based on studies of battered women in shelters and those seeking protection orders).⁴ In

a survey completed in Utah shelters of women with and without children, more than half said their pet was hurt or killed by the abusive partner. Additionally, in 60% of the cases, children in the home witnessed the animal abuse and over half tried to intervene.⁵

In the aftermath of school violence, the U.S. Department of Education listed 16 early behavioral and emotional signs that may suggest a child could become violent. One of the signs is "Past history of violent and aggressive behavior, including animal cruelty and arson."⁶

The American Society for the Prevention of Cruelty to Animals (ASPCA) has listed the following three items as the most common types of domestic violence and animal abuse:

- ♦ An adult threatens or carries out animal abuse in order to prevent another household member from telling others that he or she is a victim of domestic violence or to coerce him or her in to taking some action.⁷
- ♦ A child abuses an animal as a result of being a victim of or witness to domestic violence.⁷
- ♦ An abused animal injures a person (such as a bite).⁷

Dr. Randy Lockwood, psychologist for the Humane Society of the United States, has stated "Animal abuse is a serious crime in itself, but it is also a well documented predictor and indicator of other violence, including domestic violence, teen violence, and other serious crime."⁴

Communicable Diseases

Other Public Health/Animal Control issues have been the increasing awareness and recognition or discovery of new and old zoonoses and the reporting of cases nationally, in Nebraska, or in surrounding states. A zoonotic disease is defined as a disease transmitted from animals to humans. These zoonoses

include Hanta virus, plague, Lyme disease, Psittacosis, and Baylisascaris procyonis (raccoon roundworm), and others. While they have not been

reported in Lincoln, they are a potential public health issue for citizens and staff who may come in contact with the spreading vector.

Current Status and Trends

Animal Bites

Every day in the United States, dogs inflict an estimated 900 bites or wounds that subsequently require emergency room care.² It is estimated that only 50% of all bites are reported. Additionally, there is very limited data on other species of animals inflicting bites.

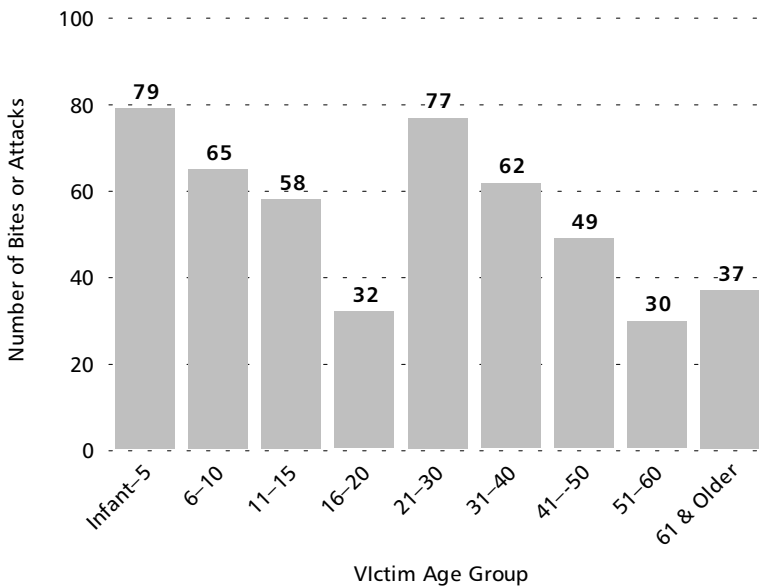
In fiscal year 1990 (September 1, 1989 through August 31, 1990), 497 bites inflicted on humans were reported and investigated in Lincoln, Nebraska.⁸ In fiscal year 1999, 489 bites (a 1.6% decrease for the nine-year period) were reported.⁹ It should be noted that the estimated human population of Lincoln for the same period has grown 11.5%. However, a ten-year comparison (fiscal year 1989 reported 423 bites)⁸ indicates a 15.6% increase in bites whereas the human population grew at approximately 14%. The increase is thought to be primarily due to the increase in animal population and the keeping of larger working or guard-dog breeds.

As of this date no fatalities have occurred in Lincoln or Lancaster County since 1976 (it is not known if there were any fatalities from animal bites prior to that date).

For 1994–95 Lincoln hospitals reported 0.8% of emergency room visits were animal bites.¹² In the United States (1990), animal bites account for 0.5% to 1.5% of emergency room visits.¹¹ Injuries inflicted by bites vary from simple puncture wounds to severe lacerations.⁷ Children, due to their size, are most likely to be bit on the head, face, or neck. Adults generally suffer wounds to the hands, upper arms, lower legs, and thighs. In the United States, children aged five to nine have the highest incident rate.¹⁰ For the period of 1992–95, 22.6 children per 10,000 under age ten were treated in emergency rooms for animal bites.¹² In Lincoln, children from infancy to five years of age received 18.1% of the reported animal bites inflicted to humans in 1998, while the age group six to ten years, 16.7%.⁹ Thus 34.8 % of the bites were incurred by young children as compared to the next highest age group, 21 to 30 years, which received 17.6%.⁹

By cooperative agreement, LLCHD’s Animal Control Division monitors and investigates all bite injuries treated at Lincoln hospitals or reported by citizens, the Lincoln Police Department, Capital Humane Society, and other law enforcement agencies. Thirty-seven percent of the 1998 bites were reported to Animal Control by emergency room personnel and 57% were reported by the victims or relatives.⁹

Figure 2: Age of bite victim, City of Lincoln, FY 1999. Of the 489 human victims, 50.1% were females and 49.9% were males in FY 1999 as compared to 46.5% females and 53.5% males in FY 1998.



Of all animal bites reported in Lincoln in 1998, 72.2% were inflicted by dogs, 22.2% by cats, and 5.6% by other animals.⁹ This is fairly comparable with 1990, which had 69.3% dog bites, 23.0% cat bites, and 7.7% other animal bites.⁸ Animals that have been neutered or spayed have the lowest frequency of bites. Unaltered male dogs are involved in bite incidents three times more often.

In 1989, the Nebraska Legislature passed dangerous-dog legislation. In 1991 the Lincoln Municipal Code was revised to be similar to but more restrictive than the state statutes. These laws provide enforcement and declaration capabilities to monitor and control dogs that are considered potentially dangerous, dangerous, or vicious based on their behavior and aggression patterns. In addition, Nebraska State Statutes and Lincoln Municipal Code stipulate that dogs, cats, and ferrets involved in bite incidents must be placed under ten-day observation.

In summary, based on reported bites in 1998 and prior years, the typical profile of a Lincoln bite incident is as follows:

1. The victim is a male or female child between the ages of 1 and 15.⁹
2. The biter dog is a guard dog/working breed and aged two years or less (highest probability is one year or less).⁹
3. The dog is unaltered, vaccinated for rabies, and licensed.⁹
4. The dog inflicts a single wound or puncture while on the dog owner's property (highest probability inside the home).⁹
5. The bite is most likely to happen during cooler months of the year such as May or September, when both humans and dogs are most active.⁹
6. The attack is considered unprovoked.⁹

Animal bites are tracked locally and nationally by other animal control agencies. There is no state or federally mandated requirement that they have to be reported to any state or federal agencies.

Animal Abuse and Violence

Understanding the relationship of domestic violence and animal abuse is relatively new, so little documentation exists. Animal abuse is one of several factors now considered as an indicator of domestic violence. Animal abuse and neglect complaints over the past ten years have varied from a high of 1,025 in 1990 to a low of 706 in 1988, with 833 reported in 1998.^{8,9} The vast majority of these cases are neglect situations where a dog has been reportedly left without food, water, or shelter. However, two cases in 1999 indicate that the relationship of animal abuse to domestic violence does exist in Lincoln. In the first case, a puppy's throat was slit when a female friend of the owner found out the owner was going to give the puppy to another woman. In the second incident, a woman asked her male friend who had been drinking alcohol to leave her residence. The man, while leaving the residence, picked up a puppy that was outside and threw it to the ground, breaking one of its rear legs. In both cases, the individuals who committed the offenses were cited.

Although cruelty/neglect calls are predominantly for neglect (such as food, water, and shelter), they do provide a gauge of how the general community treats animals and the level of citizen concern for their own or neighbors' animals. There is no documentation of what type of animal abuse or cruelty can be ignored as a factor in domestic violence. If a new ordinance is passed, it may make it possible to separate neglect from the more serious cruelty/animal abuse, but this may only highlight a

degree of potential for domestic violence. It is hoped the relationship between domestic violence and animal abuse will increase the enforcement community involvement as well as other volunteer and private agencies over the next ten years.

Communicable Disease

The positive testing of rabies is reportable, and in Lincoln the only documented cases in recent years have been in bats, which have not been involved in bites.

Health Disparities

Animal Control does not maintain race and ethnicity data from bite reports. The court citations and warning/defect tickets do have a field for race, and this is entered into our computer records. Some limited data about race and ethnicity is available for persons issued a citation or warning/defect. However, the informa-

tion is not sufficient to make any generalizations about animal ownership or risk of animal bites for racial and ethnic minorities. What is clear from the data is that children are at significant risk for injury from animal bites. They are more likely to be bitten, and their bites are more likely to be serious.

Public Health Infrastructure

Public health infrastructure needs include:

1. Improved reporting of animal bites at the state and national level.
2. Preparedness to monitor new zoonotic
3. Improved and refined use of computer technology to increase efficiency and provide regular reports to the public.

Recommendations

The recommendations by the CDC to prevent bites and fatalities, stop the spread of rabies, and decrease the ownership of aggressive animals have been reviewed for local application. They are measurable and provide comparison to past and current records.

Educational presentations reach audiences that include those who may be aware of animal abuse or domestic violence. Information and positive contact with responsible adults can positively influence children. Presentations promote pet-owner responsibility, awareness of proper animal care and treatment, spaying/neutering of pets, vaccination and licensing, and bite prevention. These recommendations and the targets proposed are believed achievable based on past experience.

- ♦ By 2005, expand animal control enforcement and education programming throughout all of Lancaster County and decrease animal-related contacts by the Sheriff's Department by fully funding all components of LLCHD's Animal Control education program.
- ♦ Implement the three categories of strategies developed by CDC to prevent dog bites beginning in Fiscal Year 2000.
 1. Owner and public education: pet-owner and non-pet-owner education, altering of pets, and school-based education.
 2. Animal Control at the community level: more stringent animal control laws and enforcement.

3. Bite reporting: evaluation of prevention efforts and improve data collection.
- ♦ Implement innovative service, education, and enforcement concepts within a city-county animal control program.
 - ♦ Continue the strong working relationship with the Capital Humane Society, including the kenneling of animals, development of mutual goals, and collaboration with other private groups to encourage the altering of pets.
 - ♦ Develop concepts for reporting animal abuses and preventing domestic violence, including ideas that may require legislative action.
 - ♦ Monitor the need to develop a reporting method for zoonoses.

Notes

Table 1

- Currently no data source.
- 1. Lincoln–Lancaster County Health Dept., Animal Control Div., *Animal Control Annual Report*, Lincoln NE, 1999. FY 98–99 data.
- 2. Bob Downey, Dir., Capital Humane Society reported data, Lincoln NE, 1998 data.
- 3. Lincoln–Lancaster County Health Dept., Environmental Health Div., Animal Control Div., *Animal Control Update Report*, 1990.
- 4. Lancaster County E-coded emergency room data, 1992–95.
- 5. Emergency Dept., National Hospital Ambulatory Medical Care Survey, *Healthy People 2010 Objectives: Draft for Public Comment*, September 1998. 1992–94 data.
- 6. U.S. Dept. of Health and Human Services, Office of Public Health and Science, *Healthy People 2010 Objectives: Draft for Public Comment*, September 1998.
- 7. Percent of dogs and cats (licensed and unlicensed) in Animal Control Licensing Files. Lincoln–Lancaster County Health Dept., Animal Control Div., *Animal Control Annual Report*, 1999. FY 98–99 data.
- 8. Data is based on household survey across United States, thus it is a percentage of altered dogs and cats per household. National Council on Pet Population Study and Policy, Shelter Relinquishment Data, March 1990. Presentation given to Society of Animal Welfare Administrators, Washington D.C.

Figure 1

1. The computer records indicate the following:
 - cats unaltered = 7.6%
 - cats altered = 92.4%
 - dogs unaltered = 27.6%
 - dogs altered = 72.4%

Narrative sources

1. MMWR Dog Bite Related Fatalities U.S., 1995–1996, vol. 46 no. 21.30, May 1997.
2. AVMA Network, Dog bite prevention media, “dog bite fact sheet,” 10 November 1998. Dog bite prevention campaign, “Nipping a problem in the bud,” vol. 212. no. 9, May 1, 1998.
3. MMWR Human Rabies Prevention – United States, vol. 48 / no. RR-1, January 8, 1999.
4. Nebraska Domestic Violence Sexual Assault Coalition, May 1999 newsletter.
5. “Animal Cruelty Overlaps With Domestic Abuse,” *Salt Lake Tribune*, 30 March 1998.
6. “Reducing Violence In U.S. Schools,” *Dispute Resolution Journal*, November 1998. <<http://www.adr.org/drj>>
7. Family Vision, ASPCA. <<http://www.aspc.org/issues>>
8. Lincoln–Lancaster County Health Department. Environmental Health Division. Animal Control Program, “Animal Control Update Report,” 1990.
9. Lincoln–Lancaster County Health Department, Animal Control Division, “Animal Control Annual Report,” 1999.
10. “The News About Dog Bites.” *Pittsburgh Parent*, 21 August 1998. <http://www.family.disney.com/Features/family_1998_05/pitt>
11. Jeffery J. Sacks, U.S. Centers for Disease Control, Division of Injury Epidemiology and Control, “Personal Communication,” August 1990.
12. Lincoln–Lancaster County Health Department, E-coded report, 1992–95.